Intravenous antibiotics

Amikacin	IV	30 mg/kg od (max 1.5g od)	Infuse over 30 mins. Levels at 23 hours after 1st dose (ie **before** 2nd dose) must be < 3mg/l. Repeat at least every 7 days. If level raised, OMIT next dose and re-measure, reduce dose by 20%. See section 6.2a	Aminoglycoside	Only use if resistant to tobramycin or gentamicin. Dilution: 0.9% sodium chloride. Used for initiation of NTM treatment – *consultant decision* Audiology at baseline.
Aztreonam	IV	50 mg/kg tds (Max 2 gms tds).	No gram-positive activity.	Monobactam	Usual reconstitution: water for injections.
Cefoxitin	IV	50mg/kg tds (Max 12g /day).	Can give as a slow bolus or infusion over 30 minutes.	Cephalosporin	Reserved for treatment of NTM – *consultant decision.* See appendix 2. NOT active against *P aeruginosa.*
Ceftazidime	IV	50 mg/kg tds (Max 9 gms /day).	Unexpected hypersensitivity on first exposure.	Cephalosporin	Usual reconstitution: water for injections.
Colistin	IV	20,000-25,000 units/kg **tds**. **Long term use at home:**	Slow infusion over 30 mins. Max concentration is 40,000 units/ml.	Polymyxin	Not a first line agent**.** **Avoid using with IV amphotericin** (renal toxicity)**.**

		Use above total daily dose divided into 2 doses i.e. (30,000-38,000 units/kg **bd**)	Boluses can be used for **Portacaths** only – not PICC lines. <12 yrs: dilute to 90,000 units/ml. ≥12 yrs: dilute to 200,000 units/ml. Measure renal function once a week.		Usual reconstitution: 0.9% sodium chloride
Co-trimoxazole	IV	>6 weeks old: 60 mg/kg BD (no upper dose limit)	Infuse over 60-90 minutes.		Useful for *A xylosoxidans & S maltophilia – consultant decision* Maintain adequate fluid intake. Treatment should be stopped if blood disorders or rashes develop. Advise patient/carer to report all rashes, sore throats and fevers. Avoid in severe liver disease.
Linezolid	IV	<12 years: 10mg/kg	Infuse over 30 – 120 mins. Monitor FBC	Oxazolidinone	Use oral route wherever possible. Otherwise convert to

		(max 600mg) tds ≥12 years: 600mg bd	weekly. ***Consultant decision* only as courses >28 days leads to risk of optic neuropathy so patients having alternate monthly Linezolid should have ophthalmic exam before starting first course and every 2 months after.** Where possible patients should be warned to immediately report any visual changes, regardless of treatment duration.		oral route as soon as clinically indicated. Last line for *MRSA* or *S aureus* where patients have not responded to conventional agents.
Meropenem	IV	20 – 40 mg/kg tds. (Max 2g tds)	Headache common.	Carbapenem	Usual dilution: water for injections.
Piperacillin / Tazobactam	IV	>1 month: 90mg/kg qds (Max 4.5g qds)		Ureidopenicillin	***Consultant decision*.** Not used unless we are desperate due to rashes and hypersensitivity.
Teicoplanin	IV	>1 month 10mg/kg (max 400 mg) 12 hourly for 3	Can give as a slow bolus or infusion over 30 minutes	Glycopeptide	*Consultant decision*

		doses (loading dose) followed 24 hours later by 10mg/kg (max 400 mg) od.			
Temocillin	IV	25mg/kg bd (Max dose 2g bd)	Slow bolus over 3 – 5 minutes	Penicillin	*Consultant decision*. 3rd line Dilution: water
Tigecycline	IV	8 – 11 years: 1.2mg/kg (max 50mg) bd ≥12 years: 100mg loading dose then 50mg bd, reduced to 50mg od if not tolerated	Infusion over 60 minutes. Nausea/vomiting a real problem. Use regular oral Ondansetron – ensure that patient receives anti-emetics **before** commencing treatment.	Tetracycline	Before using in children <12 years old, please confirm with dental professional all 'adult' teeth in place (due to discolouration of growing teeth/bone). Reserved for treatment of NTM. See appendix 2. *consultant decision*.
Tobramycin	IV	10mg/kg/day in ONE DOSE (Max 660mg/day)	Infuse over 30 mins. Levels at 23 hours after 1st dose (ie **before** 2nd dose) must be <1 mg/l) Repeat at	Aminoglycoside	Usual dilution: 0.9% sodium chloride. **DO NOT PRESCRIBE THIS DOSE FOR NON-**

		If previous course had raised trough level reduce dose by 20%	least every 7 days. If level raised, OMIT next dose and re-measure. See section 6.2a		**CF CHILDREN.**

We **RARELY** use:

i) Imipenem - too many side effects and spectrum no different from meropenem.

ii) Piperacillin/tazobactam (Tazocin®, piptazobactam) is rarely used because there is a high incidence of allergy.